

The Amateur in You, Part 2

What have you been pondering?





The Utah (or any state, for that matter) Band Plan

While helping a new ham couple experiment with their new-found craft one day, it became apparent that their HTs (handheld transceivers) were set to 147.3325 MHz simplex. When asked why they chose that particular frequency, they proudly announced that it's well within the 2-meter band, as allocated by the FCC and displayed on the ARRL band chart for Technician licensees, and that one seemed to work for them.

The couple was correct in selecting a frequency within their Technician privileges, and were congratulated on that. When asked whether they were familiar with the *Utah Band Plan*, they said they weren't, but that they had heard there was such a thing. That was when they learned that the Band Plan further clarified which frequencies *and usage* were permitted by amateurs.

According to the ARRL band chart (which reflects the corresponding Part 97 rules), anybody with a valid Technician license is indeed permitted to use any frequency in the 2-meter band, which spans 144.000 to 148.000 MHz. However, our local band plan states that certain subbands, or subsets of this span, are allocated for specific types of usage. Here is a simplified summary for some of them within the 2-meter band:

144.000 to 144.100 MHz: CW (Morse code) only

144.100 to 144.300 MHz : SSB (single sideband) only

144.300 to 144.500 MHz : satellite only

144.500 to 144.900 MHz : repeaters only

145.100 to 145.500 MHz: repeaters only

145.500 to 145.800 MHz : simplex permitted (145.510 through 145.790 MHz, odd 20 kHz)

146.000 to 146.400 MHz: repeaters only

146.420 to 146.600 MHz : simplex permitted (146.420 through 146.580 MHz, even 20 kHz)

146.600 to 147.400 MHz: repeaters only

147.400 to 147.600 MHz : simplex permitted (147.400 through 147.580 MHz, even 20 kHz)

147.600 to 148.000 MHz: repeaters only

From the above list, you can see that the frequency the couple was using, 147.3325 MHz, falls within one of the sections allocated for repeater operation, and so their selected simplex frequency did not meet the Utah Band Plan. They needed to choose a frequency from within one of the three sub-bands designated for simplex operation to be compliant.

But wait, there's more. Further examination of the Utah Band Plan shows that simplex frequencies must be selected by *odd-numbered 20 kHz frequency separations* in the 145.500 to 145.800 MHz list, and *even-numbered 20 kHz frequency separations* in the other two. This means, for example, you can use 145.510, 145.530, 145.550 MHz, etc., from the first list, and 146.480, 146.500, 146.520, etc., from the second list, and so forth. Therefore, a selection of 146.490 MHz for your simplex operation, for example, goes contrary to the Band Plan.

Finally, a band plan is not *the law*, but is a set of strongly suggested agreements that help us all play nicely with each other, in that they prevent chaos and minimize interference between stations. The band plan is set in place by the Frequency Coordinator, and in Utah is supported by the Utah VHF Society. *Keep in mind that not all state band plans follow the same rules*.